



# 4

1

SEQUENCE LISTING

<110> HOOGENBOOM, HENDRICUS R.J.M.

<120> NOVEL FAB FRAGMENT LIBRARIES AND METHOD FOR THEIR USE

<130> DX/003 CON

<140> 09/988,899

<141> 2001-11-19

<150> PCT/US00/13682

<151> 2000-05-18

<150> 99201558.6

<151> 1999-05-18

<160> 71

<170> PatentIn Ver. 2.1

<210> 1

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative peptide

<400> 1

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn  
1 5 10

<210> 2

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 2

cgatctaaag ttttgtcgtc t

21

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 3

gtccttgacc aggcagccca gggc

24

<210> 4  
 <211> 17  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 4  
 caggaaacag ctatgac 17

<210> 5  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: 6X-His tag

<400> 5  
 His His His His His His  
 1 5

<210> 6  
 <211> 349  
 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Synthetic  
 polylinker of pCES1

<220>  
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 <222> (140)..(340)

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<400> 6  
 tta ttc gca att cct tta gtt gtt cct ttc tat tct cac agt gca cag 48  
 Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ser His Ser Ala Gln  
 1 5 10 15

gtc caa ctg cag gtc gac ctc gag atc aaa cgt gga act gtg gga gag 96  
 Val Gln Leu Gln Val Asp Leu Glu Ile Lys Arg Gly Thr Val Gly Glu  
 20 25 30

tgt taataaggcg cgccaattct atttcaagga gacagtcata atg aaa tac cta 151  
 Cys Met Lys Tyr Leu  
 35

ttg cct acg gca gcc gct gga ttg tta tta ctc gcg gcc cag ccg gcc 199  
 Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala Ala Gln Pro Ala  
 40 45 50

atg gcc cag gtg cag ctg cag gag agc ggg gtc acc gtc tca agc gcc 247  
 Met Ala Gln Val Gln Leu Gln Glu Ser Gly Val Thr Val Ser Ser Ala  
 55 60 65

tcc acc aaa tct tgt gcg gcc gca cat cat cat cat cat cac ggg gcc 295  
 Ser Thr Lys Ser Cys Ala Ala Ala His His His His His His Gly Ala  
 70 75 80 85

gca gaa caa aaa ctc atc tca gaa gag gat ctg aat ggg gcc gca tag 343  
 Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Gly Ala Ala  
 90 95 100

act gtt 349  
 Thr Val

<210> 7  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 7  
 Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ser His Ser Ala Gln  
 1 5 10 15  
 Val Gln Leu Gln Val Asp Leu Glu Ile Lys Arg Gly Thr Val Gly Glu  
 20 25 30

Cys

<210> 8  
 <211> 67  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 8  
 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala  
 1 5 10 15  
 Ala Gln Pro Ala Met Ala Gln Val Gln Leu Gln Glu Ser Gly Val Thr  
 20 25 30

Val Ser Ser Ala Ser Thr Lys Ser Cys Ala Ala Ala His His His His  
                   35                  40                  45

His His Gly Ala Ala Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn  
           50                  55                  60

Gly Ala Ala  
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<210> 9  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 9  
 tggaagaggc acgttctttt cttt 24

<210> 10  
 <211> 24  
 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 10  
 acactctccc ctgttgaagc tctt 24

<210> 11  
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 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 11  
 tgaacattct gtaggggcca ctg 23

<210> 12  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 12  
 agagcattct gcaggggcca ctg 23

<210> 13  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 13  
 cagrtgcagc tgggtgcartc tgg 23

<210> 14  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 14  
 saggtccagc tggtrcagtc tgg 23

<210> 15  
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<400> 15  
 cagrtcacct tgaaggagtc tgg 23

<210> 16  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 16  
 saggtgcagc tgggtggagtc tgg 23

<210> 17  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 17  
gaggtgcagc tggaggagwc ygg 23

<210> 18  
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<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 18  
caggtgcagc tacagcagtg ggg 23

<210> 19  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 19  
cagstgcagc tgcaggagtc sgg 23

<210> 20  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 20  
gargtgcagc tggtagcagtc tgg 23

<210> 21  
<211> 23  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 21  
caggtacagc tgcagcagtc agg 23

<210> 22  
<211> 23  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 22  
gacatccagw tgacccagtc tcc 23

<210> 23  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 23  
gatgttgatga tgactcagtc tcc 23

<210> 24  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 24  
gaaattgtgw tgacrcagtc tcc 23

<210> 25  
<211> 23  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 25  
gatattgtga tgaccacac tcc 23

<210> 26  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 26  
gaaacgacac tcacgcagtc tcc 23

<210> 27  
<211> 23  
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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 27

gaaattgtgc tgactcagtc tcc

23

<210> 28

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 28

cagtctgtgc tgactcagcc acc

23

<210> 29

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 29

cagtctgtgy tgacgcagcc gcc

23

<210> 30

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 30

cagtctgtcg tgacgcagcc gcc

23

<210> 31

<211> 21

<212> DNA

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<223> Description of Artificial Sequence: Primer

<400> 31

cartctgccc tgactcagcc t

21



<210> 32  
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<220>  
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<400> 32  
 tcctatgwgc tgactcagcc acc 23

<210> 33  
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<400> 33  
 tcttctgagc tgactcagga ccc 23

<210> 34  
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<220>  
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<400> 34  
 cacggtatac tgactcaacc gcc 23

<210> 35  
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 <223> Description of Artificial Sequence: Primer

<400> 35  
 caggctgtgc tgactcagcc gtc 23

<210> 36  
 <211> 23  
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<220>  
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<400> 36  
 aattttatgc tgactcagcc cca 23

<210> 37  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 37  
 cagrcctgtgg tgacycagga gcc 23

<210> 38  
 <211> 23  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 38  
 cwgcctgtgc tgactcagcc mcc 23

<210> 39  
 <211> 51  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 39  
 accgcctcca ccgggcgcgc cttattaaca ctctcccctg ttgaagctct t 51

<210> 40  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 40  
 accgcctcca ccgggcgcgc cttattatga acattctgta ggggccactg 50

<210> 41  
 <211> 50  
 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 41  
accgcctcca ccgggcgcgc cttattaaga gcattctgca ggggccactg 50

<210> 42  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 42  
gtcctcgcaa ctgcggccca gccggccatg gccagrtgc agctggtgca rtctgg 56

<210> 43  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 43  
gtcctcgcaa ctgcggccca gccggccatg gccsaggtcc agctggtrca gtctgg 56

<210> 44  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 44  
gtcctcgcaa ctgcggccca gccggccatg gccagrtca cttgaagga gtctgg 56

<210> 45  
<211> 56  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 45  
gtcctcgcaa ctgcggccca gccggccatg gccsaggtgc agctggtgga gtctgg 56

<210> 46  
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<212> DNA  
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<223> Description of Artificial Sequence: Primer

<400> 46

gtcctcgcaa ctgcggccca gccggccatg gccgaggtgc agctggtgga gwcyyg 56

<210> 47

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 47

gtcctcgcaa ctgcggccca gccggccatg gccaggtgc agctacagca gtgggg 56

<210> 48

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 48

gtcctcgcaa ctgcggccca gccggccatg gccagstgc agctgcagga gtcsgg 56

<210> 49

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 49

gtcctcgcaa ctgcggccca gccggccatg gccgargtgc agctggtgca gtctgg 56

<210> 50

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 50

gtcctcgcaa ctgcggccca gccggccatg gccaggtac agctgcagca gtcagg 56

<210> 51

<211> 24

<212> DNA

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&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 51

tgaggagacg gtgaccaggg tgcc

24

&lt;210&gt; 52

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 52

tgaagagacg gtgaccattg tccc

24

&lt;210&gt; 53

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 53

tgaggagacg gtgaccaggg ttcc

24

&lt;210&gt; 54

&lt;211&gt; 24

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 54

tgaggagacg gtgaccgtgg tccc

24

&lt;210&gt; 55

&lt;211&gt; 44

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Primer

&lt;400&gt; 55

accgcctcca ccagtgcact tgacatccag wtgaccagct ctcc

44

<210> 56  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 56  
 accgcctcca ccagtgcact tgatgttgatg atgactcagt ctcc 44

<210> 57  
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 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 57  
 accgcctcca ccagtgcact tgaaattgtg wtgacrcagt ctcc 44

<210> 58  
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 <212> DNA  
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<220>  
 <223> Description of Artificial Sequence: Primer

<400> 58  
 accgcctcca ccagtgcact tgatattgtg atgacccaca ctcc 44

<210> 59  
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 <212> DNA  
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 <223> Description of Artificial Sequence: Primer

<400> 59  
 accgcctcca ccagtgcact tgaaacgaca ctcacgcagt ctcc 44

<210> 60  
 <211> 44  
 <212> DNA  
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<400> 60  
 accgcctcca ccagtgcact tgaaattgtg ctgactcagt ctcc 44

<210> 61  
<211> 41  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 61  
accgcctcca ccagtgacac gtctgtgctg actcagccac c 41

<210> 62  
<211> 41  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 62  
accgcctcca ccagtgacac gtctgtggtg acgcagccgc c 41

<210> 63  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 63  
accgcctcca ccagtgacac gtctgtcgtg acgcagccgc c 41

<210> 64  
<211> 39  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 64  
accgcctcca ccagtgacac rtctgccctg actcagcct 39

<210> 65  
<211> 44  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 65  
accgcctcca ccagtgcact ttcctatgwg ctgactcagc cacc 44

<210> 66  
<211> 44  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 66  
accgcctcca ccagtgcact ttcttctgag ctgactcagg accc 44

<210> 67  
<211> 41  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 67  
accgcctcca ccagtgcaca cggtatactg actcaaccgc c 41

<210> 68  
<211> 41  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 68  
accgcctcca ccagtgcaca ggctgtgctg actcagccgt c 41

<210> 69  
<211> 44  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Primer

<400> 69  
accgcctcca ccagtgcact taattttatg ctgactcagc ccca 44

<210> 70  
<211> 41  
<212> DNA  
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<220>

<223> Description of Artificial Sequence: Primer

<400> 70

accgcctcca ccagtgcaca grctgtggtg acycaggagc c

41

<210> 71

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 71

accgcctcca ccagtgcacw gcctgtgctg actcagccmc c

41